

Phyllocnistis xenia Hering, 1936, a recent addition
to the British list of Lepidoptera

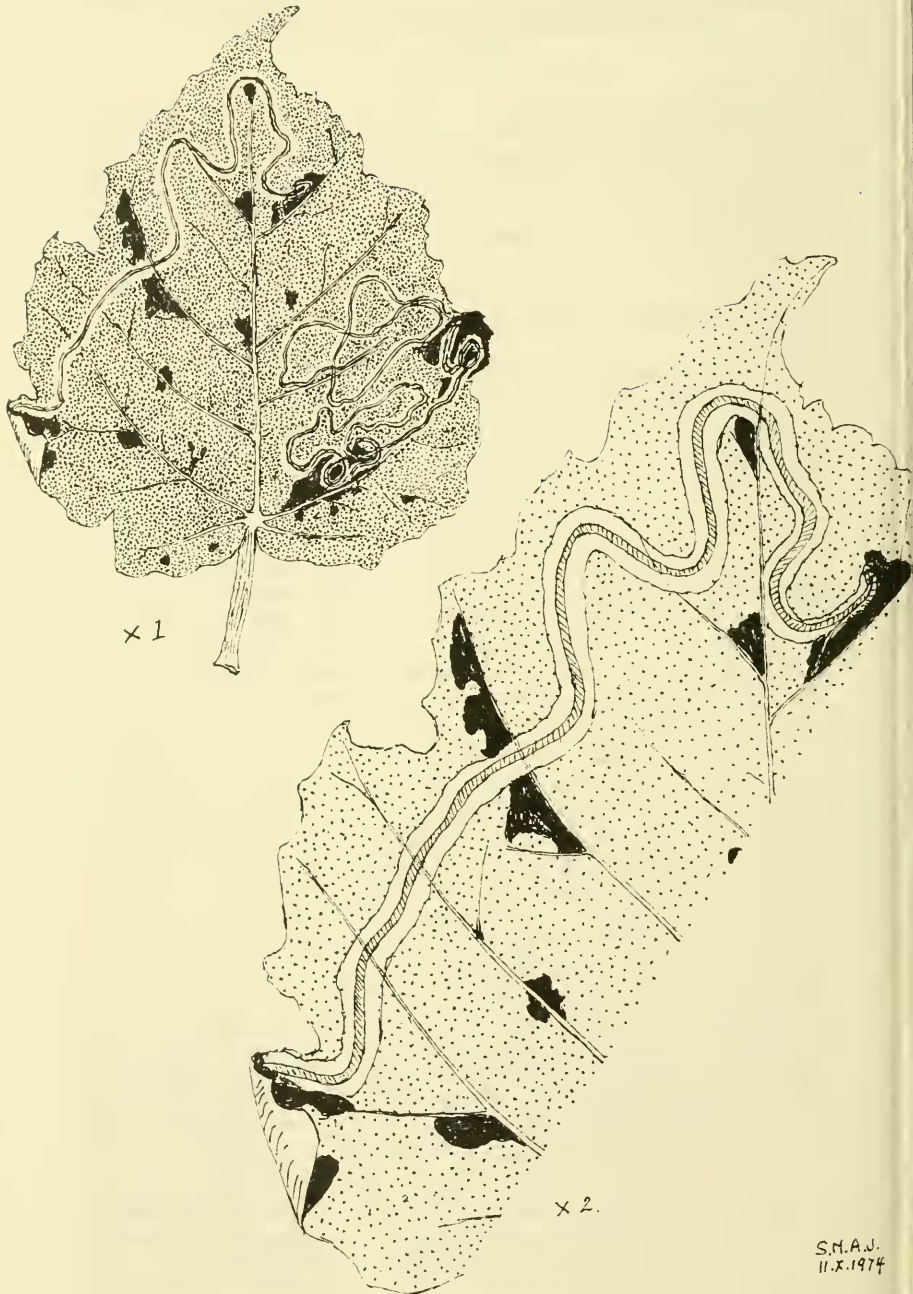
By E. C. PELHAM-CLINTON*

The genus *Phyllocnistis* (Zeller), now separated from Gracillariidae as a distinct family *Phyllocnistidae* (Kloet and Hincks, 1972) has for many years been known to include two British species. In 1925 Waters introduced a third species to the British list under the name *P. tremulella* (Zeller, 1843), now considered a synonym of *P. labyrinthella* (Bjerkander, 1790). But in 1928 he withdrew the record realising that his specimens were after all only lightly marked forms of *P. unipunctella* (Stephens, 1834) (then known as *P. suffusella* (Zeller, 1847)).

On 9th September, 1974 I discovered in a small area of scrubby woodland near Dover some mines on *Populus canescens* (Grey Poplar) of very striking appearance (fig. 1). These agreed with those of *P. unipunctella* in their resemblance to a much contorted trail of mucus left by a snail on the upper surface of a leaf, but differed in having a strong line of frass in the centre of the whole length of the mine, in this respect resembling the mine of *P. saligna* (Zeller, 1839). Some small folds on leaf margins showed that some larvae had pupated in the usual *Phyllocnistis* manner and from one of these the first moth emerged on the following day, to be followed by a few others within the following week. In 1975 the site was visited by other microlepidopterists who reported that mines were abundant.

I was straight away faced with a difficulty about the identity of this species. Hering (1957) recognised two species with mines with a central frass track in leaves of *Populus*, *Phyllocnistis xenia* (Hering) on *Populus alba* (White Poplar) and *P. labyrinthella* (Bjerkander) usually on *Populus tremula* (Aspen). It seemed possible that a *Phyllocnistis* on *Populus canescens*, a species in some respects intermediate between *P. alba* and *P. tremula*, might demonstrate that the *Phyllocnistis* associated with all three *Populus* species were the same. Hering described *P. xenia* in 1936, but by 1957 he was doubtful of the distinction and stated that it was perhaps identical with *P. labyrinthella*. The differences described as separating the two in the adult stage are slight, *P. xenia* having a pure white ground colour, no ochreous colouring between the two most basal costal strigulae and no dark spot on the middle of the dorsum: this last character is undoubtedly variable and in most specimens I have seen the spot is present. The two species have not been separated in the collection of the British Museum (Natural History). If we are to treat them as one we should use the older name, *P. labyrinthella* (Bjerkander) for our species.

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Figure 1. Mines of *Phyllocnistis xenia* Hering in leaf of *Populus canescens*.

However, the following facts support the contrary view. Although *Phyllocnistis xenia* was described by Hering (1936) from *Populus alba*, at that time *P. canescens* was often regarded as a variety of *P. alba* and Hering did not himself distinguish them. Lt. Col. Emmet has pointed out to me that the foodplant of *Ectoedemia turbidella* (Herrich-Schäffer) is stated by Hering (1957) as *Populus alba*, whereas in fact it is confined to *P. canescens*: thus Hering may well have misidentified the foodplant of *Phyllocnistis xenia*. Further evidence of distinction is provided by the position of the mine: according to Hering *P. xenia* always mines the upperside of the leaf, *P. labyrinthella* often the underside. *P. labyrinthella* inhabits northern and *P. xenia* southern Europe (type locality Torre del Mar, Andalusia, Spain) and I am indebted to Dr. J. Klimesch for the information that both occupy the same territory in central Europe. Such an overlap is good evidence of specific distinction.

In such doubtful cases it is better to err by treating one species as two rather than to make the opposite error by including two species under one name: on this principle and on the balance of evidence so far obtained I propose to treat the species as separate and record our species as *Phyllocnistis xenia* Hering.

Phyllocnistis xenia is easily separable in the adult stage from the other two British species of *Phyllocnistis*: to put the differences in the form of a key:

1. Forewing with two grey longitudinal streaks from base, the space between usually filled with ochreous
P. saligna (Zeller)
- No dark longitudinal streaks from base of forewing 2
2. Forewing with four costal strigulae: dark spot on dorsum, if present, diffuse and within basal quarter: often extensive grey and ochreous suffusion in median area *P. unipunctella* (Stephens)
- Forewing with five costal strigulae, the apical one sometimes indistinct: dark dorsal spot, if present, small and at about one-third from base: clear white without suffusion in median area *P. xenia* (Hering)

A photograph by Mr. D. E. Wilson which shows the characters of *P. xenia* very well was printed in *Proc. Trans. Br. ent. nat. Hist. Soc.*, 8 (1): pl. 3, fig. 24 (1975).

At present this species is known in only one British locality. Having such a conspicuous mine it would surely not have been overlooked for long and therefore seems likely to be a quite recent arrival in Britain.

In addition to those already mentioned, my thanks are due to Mr. S. N. A. Jacobs for the fine drawing of a mined leaf of *Populus canescens* illustrated as fig. 1.

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Notes and Observations

PROFUSION OF BUTTERFLIES IN EARLY MAY 1976. — The phenomenally warm spell which struck the south of England with three successive days of shade temperatures at over 80°F. during the second week in May, had a remarkable effect on the butterfly population. On May 1st, I visited a favoured haunt on the Surrey-Sussex border, but in spite of fairly mild conditions hardly an insect was apparent. However, when I revisited this locality on May 9th in company with Dr. John Holmes it was a very different picture in the short heat-wave. Butterflies seemed everywhere and in fair profusion. By the end of our visit we had recorded no less than a dozen species, ten of which were of this year's origin. *Leptidea sinapis* L. was flying in most of the rides, but only the males together with many *Anthocharis cardamines* L. and *Pararge egeria* L. *Pieris rapae* L., *P. rapae* L. and *P. brassicae* were also much in evidence. *Clossiana euphrosyne* L. was already well under way, and we also noted *Heodes phlaeas* L., *Celastrina argiolus* L. and *Pyrgus malvae* L. Other collectors had also seen *Callophrys rubi* L. Of the hibernators both sexes of *Gonepteryx rhamni* L. were everywhere and we saw a single *Inachis io* L., not a bad score for so early in the season. — C. G. M. DE WORMS, Three Oaks, Shore's Road, Woking, Surrey.

EARLY APPEARANCE OF HYLOICUS PINASTRI L. AND OTHER MOTHS AT WOKING. — The remarkable heat-wave that broke in early May brought out moths in quantity, especially on the night of May 9th, 1976 when the temperature did not fall below 60°F. all night here. Among a big concourse at my m.v. trap was a Pine Hawk which I had only once before seen at such an early date, in the 1950's. *Hippocrita jacobaeae* L. was another unexpected visitor with a good assortment of the Prominents, notably *Notodonta trepida* Esp. which seems in great plenty this year. — C. G. M. DE WORMS, Three Oaks, Shore's Road, Woking, Surrey.

MOTHS AT BLACKBERRY FRUIT DURING SEPTEMBER 1975. — I found the following moths at a small patch of over-ripe blackberries in Darenth Wood on 21st September, 1975: *Cirrhia icteritia* Hufn., two, *Phlogophora meticulosa* L., two, a fresh female *Aporophyla luteola* Schiff. and a single *Dysstroma truncata* Hufn. — J. PLATTS, 11 Maydowns Road, Chestfield, Kent.